CHAPTER 1 INTRODUCTION

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CHAPTER 1

INTRODUCTION

1.1 Preview of this Section

This section provides important background information about this Amendment to the Northeast National Petroleum Reserve – Alaska (also referred to as the Planning Area) Integrated Activity Plan/Environmental Impact Statement (Amended IAP/EIS; amendment). This section:

- Briefly describes the proposed project;
- Explains why the U.S. Department of the Interior (USDOI) Bureau of Land Management (BLM) is considering amending the 1998 Northeast National Petroleum Reserve Alaska IAP/EIS (1998 Northeast IAP/EIS; USDOI BLM and Minerals Management Service [MMS] 1998);
- Describes the decisions that will be made during the amendment process;
- Summarizes other documents that influenced the development of the Amended IAP/EIS;
- Describes the administrative history of the National Petroleum Reserve Alaska, and federal, state, and local laws and regulations that influence BLM activities in the Northeast National Petroleum Reserve Alaska;
- Describes interrelationships and consultation activities among the BLM, government agencies, tribal governments, conservation groups, and private citizens;
- Describes how this Amended IAP/EIS is being constructed with the help of the public;
- Lists the major issues raised during scoping and considered in this Amended IAP/EIS; and
- Summarizes what will be covered in the remainder of the Amended IAP/EIS.

1.2 Proposed Action

The National Petroleum Reserve – Alaska consists of 23 million acres located on the North Slope of Alaska (Map 1-1). The Planning Area consists of approximately 4.6 million acres located in the northeastern portion of the National Petroleum Reserve – Alaska. The BLM is amending its 1998 Northeast IAP/EIS to consider opening portions of the BLM-administered lands (public lands) that are currently unavailable for oil and gas leasing in the Northeast National Petroleum Reserve – Alaska. In addition, the BLM proposes to develop performance-based lease stipulations and Required Operating Procedures (ROPs) in the Planning Area similar to those stipulations and ROPs included in the *Northwest National Petroleum Reserve – Alaska IAP/EIS Record of Decision* (Northwest IAP/EIS ROD; USDOI BLM and MMS 2004).

1.3 Purpose and Need for the Proposed Action

1.3.1 Purpose and Need

The U.S. currently import's more than half of its petroleum supply, and the federal government projects that the proportion of the Nation's oil coming from overseas will continue to climb, approaching two-thirds by 2020 (U.S. Department of Energy [USDOE] 2002). Oil production in the U.S. overall, and on Alaska's North Slope, has been declining for several years. Importation of foreign oil increases this country's trade deficit, while domestic oil

production, especially on federal lands, contributes directly to the health of the nation's economy and to federal revenues.

Northern Alaska is a very rich petroleum province, with an estimated in-place endowment of oil and gas equivalent to 77 billion barrels (Bbbl), and proven original oil reserves exceeding 20 Bbbl, of which over 13 Bbbl have been produced. Exploration in northern Alaska has located at least 38 oil and gas fields, although most reserves are in a few, very large oil fields near Prudhoe Bay. The essential oil-source rock and reservoir sequences creating these commercial oil fields extend across much of the North Slope, including the National Petroleum Reserve – Alaska. Because of these geologic trends and the abundance of untested potential traps, northern Alaska and the adjacent continental shelf are considered to hold high potential for new oil and gas fields.

Congress first authorized an oil and gas-leasing program in the National Petroleum Reserve – Alaska in the Department of the Interior and Related Agencies' Fiscal Year (FY) 1981 Appropriations Act (Public Law [PL] 96-514, December 12, 1980). To meet the provisions of the National Environmental Policy Act (NEPA) for conducting lease sales, the BLM completed an Environmental Assessment (EA) of the National Petroleum Reserve – Alaska in 1981 and an EIS in 1983 (USDOI BLM 1983a). The 1983 EIS deleted some areas from leasing and recommended stipulations to protect surface resources, especially in areas with high surface values. A total of four lease sales were held during 1982 to 1985, resulting in the drilling of a single well that was abandoned as a dry hole in 1985. One other industry well was drilled in 1982 on private in-holdings at Cape Halkett, but information from that well remains confidential.

The Alpine discovery (Alpine field) played an important role in re-igniting exploration interest in the National Petroleum Reserve – Alaska. Atlantic Richfield Company (ARCO) and its partners discovered the Alpine field on state lands to the east of the Planning Area in the winter of 1994-1995 (Alaska Report 1996). Development and appraisal drilling has confirmed its reserve potential of 429 MMbbl, and in the fall of 2003 the Alpine Field recorded 100 MMbbl of production (Alaska Oil and Gas Reporter 2003). The field may even have economically recoverable reserves as high as 500 MMbbl (Gingrich 2001). The Alpine field is one of the larger fields discovered in Alaska since discovery of the Prudhoe Bay field; it extends westward into the National Petroleum Reserve – Alaska. Similar reservoirs have been the principal targets for exploration on leases acquired in the Planning Area.

As a result of renewed interest in the National Petroleum Reserve – Alaska, and the need to update the environmental analysis of potential impacts from oil and gas development in the National Petroleum Reserve – Alaska, the BLM began an assessment in 1997 of the potential impacts from oil and gas development in the Planning Area, including all lands in the National Petroleum Reserve – Alaska east of the Northwest National Petroleum Reserve – Alaska IAP/EIS culminated in a ROD in October 1998 that superseded the decisions of the 1983 EIS and included a decision to make approximately 4 million of the 4.6 million acres available for oil and gas leasing (USDOI BLM and MMS 1998).

The 1998 Northeast IAP/EIS ROD (see Appendix A) outlined multiple-use management of the 4.6-million-acre Northeast National Petroleum Reserve – Alaska area, and emphasized restrictions on surface activities, consultation with local residents, and coordinated scientific studies to protect wildlife habitat, subsistence use areas, and other resources. Among other decisions, this document made approximately 589,000 acres in the Teshekpuk Lake area unavailable for leasing and an additional 268,862 acres were restricted to leasing with no permanent facilities and no exploratory wells. The area made unavailable to leasing near Teshekpuk Lake is an area with especially high oil and gas potential. By excluding these areas from future oil and gas leasing and placing restrictions on surface activities in other areas, approximately 1.8 billion of the estimated 3.1 billion barrels of technically recoverable oil in the Planning Area was made unavailable for helping to meet future energy needs. The 1998 Northeast IAP/EIS ROD also contained a set of prescriptive-based stipulations to protect natural and cultural resources in the Planning Area.

In the 5 years since the completion of the 1998 Northeast IAP/EIS ROD, the BLM has held oil and gas lease sales in the Planning Area, leasing 133 tracts in 1999, and leasing an additional 60 tracts in 2002 (Map 1-2). Many lease tracts were sold around the perimeter of the Teshekpuk Lake area. Since the initial lease sale, industry has

completed many miles of seismic lines and drilled 17 exploratory wells. ConocoPhillips Alaska, Inc. has proposed development of five drilling pads that would be satellites to its Alpine field, near the village of Nuiqsut. Two of the pads would be within the Planning Area.

Based on the results from exploration wells drilled on leases acquired in 1999, and from additional exploration and development drilling conducted in the Alpine field, the number and size of oil and gas deposits may be greater than previously thought. As noted above, the reserve potential for the Alpine field was estimated to be 365 MMbbl in 1998. More recent exploration studies have confirmed its reserve potential of 429 MMbbl, and the field may even have economically recoverable reserves as high as 500 MMbbl (Gingrich 2001). This would make the Alpine field one of the largest fields in Alaska.

To assess opportunities for oil and gas production on federal lands in the Northwest National Petroleum Reserve – Alaska, the BLM began assessing the potential impacts that could result from oil and gas development in the Northwest National Petroleum Reserve – Alaska in 2001. The Northwest IAP/EIS was completed in December 2003 (USDOI BLM and MMS 2003) and culminated in a ROD in January 2004 that superseded the decisions of the 1983 EIS and included a decision to make 8.8 million acres available for oil and gas leasing (USDOI BLM and MMS 2004). The ROD also contained a set of performance-based stipulations to protect natural and cultural resources in the Northwest National Petroleum Reserve – Alaska. These stipulations differ from those developed for the 1998 Northeast IAP/EIS in that they:

- Do not include actions that already exist in the form of regulation or law; and
- Provide the BLM and other land users, including industry, greater flexibility by emphasizing the intent or
 objective of the mitigation to protect the environment.

In 2002, the President's National Energy Policy Development Group recommended that the President direct the Secretary of the Interior to "consider additional environmentally responsible oil and gas development, based on sound science and the best available technology, through further lease sales in the National Petroleum Reserve – Alaska" and that "such consideration should *include areas not currently leased within the northeast corner of the National Petroleum Reserve – Alaska*" (bold added).

To carry out its management responsibilities and respond to the Presidential and Congressional directives to the Secretary of the Interior, the BLM is proposing to amend its 1998 Northeast IAP/EIS to:

- Consider leasing portions of lands currently unavailable or under a No Surface Activity restriction to oil and gas leasing in the Northeast National Petroleum Reserve Alaska; and
- Consider developing performance-based lease stipulations and ROPs that would provide the BLM greater flexibility in protecting important surface resources from the impacts of oil and gas activities, similar to those developed for the Northwest National Petroleum Reserve Alaska.

1.3.2 Authority

The BLM is undertaking this Amended IAP/EIS in accordance with the President's energy policy and the BLM's responsibilities to manage these lands under authority of two laws passed in 1976—the Naval Petroleum Reserves Production Act (NPRPA) and the Federal Land Policy and Management Act (FLPMA). The Amended IAP/EIS addresses the BLM's responsibilities under the NPRPA and FLPMA through a NEPA-required process. The BLM expects any plan amendment to have a life of 10 to 15 years, though it may prove suitable for either a shorter or longer period.

The authority for the management options in the Amended IAP/EIS comes from several statutes, including NEPA, the Alaska National Interest Lands Conservation Act (ANILCA), and particularly the FLPMA and the NPRPA. Under FLPMA, the Secretary has broad authority to regulate the use, occupancy, and development of the public

lands and to take whatever action is required to prevent unnecessary or undue degradation of the public lands (43 United States Code [USC] § 1732).

Under the NPRPA, the Secretary has the authority to conduct oil and gas leasing and development in the National Petroleum Reserve – Alaska (42 USC § 6508). The NPRPA specifically directs the Secretary to undertake "an expeditious program of competitive leasing of oil and gas" in the National Petroleum Reserve-Alaska 42 USC § 6508. The NPRPA also provides that the Secretary "shall assume all responsibilities" for "any activities related to the protection of environmental, fish and wildlife, and historical or scenic values" (42 USC § 6503[b]). In addition, the NPRPA authorizes the Secretary to "promulgate such roles and regulations as he deems necessary and appropriate for the protection of such values within the reserve." The NPRPA, as amended, contains special provisions that apply to any exploration or development activities within areas "designated by the Secretary of the Interior containing any significant subsistence, recreational, fish and wildlife, or historical or scenic value" (42 USC § 6504[b], 6508).

Based on this authority, the Secretary in 1977 designated two Special Areas within the Planning Area (Map 1-3), in which all activities were to "be conducted in a manner which will assure maximum protection" consistent with the NPRPA 42 USC § 6504. The Teshekpuk Lake Special Area, which is almost entirely within the Planning Area, was created to protect migratory waterfowl and shorebirds. The Colville River Special Area, a third of which is in the Planning Area, was created to protect the Arctic peregrine falcon, which at that time was an endangered species. Provisions in the NPRPA require that any oil and gas exploration or development within a special area "shall be conducted in a manner which will assure the maximum protection of such surface resources to the extent consistent with the requirements of [the] Act for the exploration of the reserve" (42 USC § 6504[b], 6508). To ensure that maximum protection is given to the Teshekpuk Lake Special Area, BLM has developed resource specific stipulations, which apply under the various alternatives, specifically to: 1) protect Teshekpuk Lake (Stipulation K-3 [Teshekpuk Lake has been deferred from oil and gas leasing (approximately 211,000 acres]); 2) protect goose molting areas in the vicinity of Teshekpuk Lake that provide important habitat for black brant, Canada geese, and white-fronted geese (Lease Stipulation K-4); and 3) protect caribou habitat in the Teshekpuk Lake Special Area (Lease Stipulations K-3, K-5, K-6, K-8, K-9, K-10, and K-11). Coastal areas within the Teshekpuk Lake Special Area would be afforded special protection to minimize alteration of caribou movement within caribou coastal insect-relief areas and to protect other coastal and marine resources (Stipulation K-6). To ensure that maximum protection is given to the Colville River Special Area, the BLM has developed a Lease Stipulation (K-7) to ensure that the loss of raptor habitat associated with the river is prevented or minimized. Under Lease Stipulation K-1, which is designed to protect natural flow patterns and habitat of several rivers in the Colville River Special Area, permanent oil and gas facilities, except essential transportation and pipeline crossings, would not be allowed within 1 mile of the west bluff (or bank if there is no bluff) along that portion of the Colville River within the Planning Area. For the Kikiakrovak and Kogosukruk rivers, also within the Colville River Special Area, permanent oil and gas surface facilities, except essential transportation crossings, would not be allowed within 1 mile of the bluff (or bank if there is no bluff). In addition, Lease Stipulation K-8 prohibits most types of surface structures in the Pik Dunes. These stipulations are discussed further in Chapter 2 (Alternatives). Oil and gas activities must also include or provide for "conditions, restrictions, and prohibitions as the Secretary deems necessary or appropriate to mitigate reasonably foreseeable and significantly adverse effects on the surface resources of the National Petroleum Reserve – Alaska" (42 USC § 6508[1]). In conducting this Amended IAP/EIS, the BLM is fulfilling these statutory mandates.

Section 1320 of the ANILCA exempted the National Petroleum Reserve – Alaska from Section 202 of FLPMA (43 USC § 1712), which requires the preparation of land use plans (called Resource Management Plans, or RMPs, in regulations adopted by the BLM). Because of this exemption, the proposed amendment is not a RMP (as most BLM planning efforts are called). The statute (FLPMA 202) and regulations governing the preparation of RMPs (43 Code of Federal Regulations [CFR] § 1610) do not apply to this amendment.

1.4 Northeast National Petroleum Reserve – Alaska Planning Area Boundary

Map 1-1 shows the Planning Area in relation to the rest of Alaska and to Alaska's North Slope, respectively. Map 1-4 provides the same view with Iñupiat place names. The Amended IAP/EIS covers federal public lands within the planning boundary (Map 1-5). The Amended IAP/EIS does not address sub-surface estates if owned by Alaska Native Claims Settlement Act (ANCSA) regional or village corporations, primarily located near the community of Nuiqsut; the surface lands within certified Native Allotments owned by private individuals; or the airstrip at Umiat, owned by the State of Alaska. However, the cumulative impacts of reasonably foreseeable activities on these adjacent non-federal lands are considered in the cumulative impact section of this Amended IAP/EIS (Section 4.7; Effects of the Cumulative Case). For a more extensive discussion of land status, see Section 3.4.5.1 (Land Ownership and Uses), which also contains a land status map.

A few technicalities regarding the boundary of the Planning Area are worth mentioning. The eastern boundary of the Planning Area is the eastern boundary of the National Petroleum Reserve – Alaska along the western bank of the Colville River. That boundary is defined in Executive Order (EO) 3797-A as the "highest highwater mark... on the [western] bank," which the U.S. District Court in Alaska construed to be "on and along the bank at the highest level attained by the waters of the river when they reach and wash the bank without overflowing it" (Alaska v U.S.; A78-069 Civ). Thus, neither the Colville River nor its bank immediately adjacent to the river are in the Planning Area. Most of the western boundary is along the eastern bank of the Ikpikpuk River, so that river is also outside the Planning Area. Finally, the U.S. Supreme Court (*in* U.S. v Alaska; No. 84, Orig. decided on June 19, 1997) determined that the National Petroleum Reserve – Alaska included tidally influenced waters and that those waters and the submerged lands underlying them did not transfer to the State of Alaska at statehood.

1.5 Administrative History of the National Petroleum Reserve – Alaska

Petroleum exploration in northern Alaska began in the early 1900s with field parties sponsored by the U.S. Geological Survey (USGS). Prompted by reports of oil seeps in the Cape Simpson area and concerns about domestic fuel supplies, President Warren Harding established Naval Petroleum Reserve Number 4 (PET-4) in 1923. In an era in which naval armaments around the world regularly appeared in newspaper headlines and the U.S. Navy was converting its ships to oil power, the President issued an EO establishing PET-4, and noting that "the future supply of oil for the Navy is at all times a matter of national concern." He observed that "there are large seepage's of petroleum along the Arctic Coast of Alaska," but that existing laws to "promote development seem imperfectly applicable in the region because of its distance, difficulties, and large expense of development" (EO 3797-A, February 27, 1923). The EO withdrew the lands from the application of the land and mineral laws for 6 years. Later, the time limit was deleted.

Fuel shortages during World War II prompted the first intensive government-funded exploration program in the National Petroleum Reserve – Alaska by the Navy from 1944 to 1952. This drilling produced eight oil and gas discoveries: Umiat, Fish Creek, South Barrow, Simpson, Meade, Wolf Creek, Gubik, and Square Lake.

With Alaska achieving statehood in 1959, petroleum exploration shifted to state lands on the North Slope in the area between the National Petroleum Reserve – Alaska on the west and the Arctic National Wildlife Refuge (ANWR) on the east. State lease sales in 1964 and 1965 were followed by the discovery of the enormous Prudhoe Bay field in 1968. With 13.7 Bbbl of original oil reserves, Prudhoe Bay is the largest oil field ever found in North America. Four other very large oil fields were soon discovered near Prudhoe Bay, including the Kuparuk River field (2.6 Bbbl, 1969), the Milne Point field (404 MMbbl, 1970), the Endicott-Duck Island field (582 MMbbl, 1978), and the Point McIntyre field (549 MMbbl; ADNR 2000). These five fields account for 92 percent of North Slope oil and nearly 16 percent of all U.S. oil production (5.88 million barrels per day [MMbpd]). Known North

Slope natural gas deposits are also huge, with original proven reserves in the Prudhoe Bay field of 26 trillion cubic feet (Tcf) and about 35 Tcf for the North Slope.

By the mid-1970s, the Navy's dependence on oil was dwarfed by that of the Nation's economy. The oil embargo of 1973 highlighted this need. There was also a rising environmental consciousness and interest in the variety and richness of wildlife and other values in PET-4. Consequently, President Gerald Ford signed the NPRPA to develop PET-4 and the other three Naval Petroleum Reserves, but to do so "in a manner consistent with the total energy needs of the Nation" (PL 94-258, April 5, 1976). Twenty-eight exploration wells were drilled, and numerous finds of oil and gas were reported, but no commercial fields were discovered.

The NPRPA authorized production of oil from the reserves in the contiguous 48 states. Two of the three petroleum reserves in these states are now extensively developed. For example, the Elk Hills, California, reserve has produced over 1.1 Bbbl of oil, including 17.3 MMbbl in 2000, ranking it as the 11th largest producer in the U.S. outside Alaska (U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves: 2000 Annual Report, December 2001). The NPRPA prohibited petroleum production from National Petroleum Reserve – Alaska until authorized by Congress.

In 1977, management of PET-4 was transferred from the Navy to the USDOI, and the area was renamed the National Petroleum Reserve – Alaska. In 1980, Congress granted authorization to develop oil and gas resources, and directed the Secretary to undertake "an expeditious program of competitive leasing of oil and gas" in the Reserve (PL 96-514, December 12, 1980). To meet the provisions of NEPA to conduct lease sales, the BLM completed an EA of the National Petroleum Reserve – Alaska in 1981 and an EIS in 1983 (USDOI BLM 1983a). The 1983 EIS removed some areas from leasing and recommended additional stipulations, especially in areas with high surface values.

Little activity occurred in the Planning Area from the mid-1980s through mid-1990s. In 1997, the BLM began assessing the potential impacts from oil and gas development activities in the Planning Area, including all lands in the National Petroleum Reserve – Alaska east of the Northwest National Petroleum Reserve – Alaska. The 1998 Northeast IAP/EIS culminated in a ROD in October 1998 that superseded the decisions of the 1983 EIS and included a decision to make approximately 4 million acres available for oil and gas leasing (Appendix A; USDOI BLM and MMS 1998).

In 2001, the BLM began planning for the Northwest National Petroleum Reserve – Alaska, including all lands west of the Planning Area. The Northwest National Petroleum Reserve – Alaska is approximately 9.4 million acres, of which approximately 8.8 million acres are under federal jurisdiction. This plan, which culminated in a ROD in January 2004, will guide future management of the Northwest National Petroleum Reserve – Alaska, and will supersede management guidelines developed under the 1983 EIS for that area.

ConocoPhillips Alaska, Inc. proposed development of five drilling pads that would be satellites to its Alpine field, near the village of Nuiqsut. Two of the pads would be on public lands within the Planning Area. The BLM, in cooperation with the U.S. Army Corps of Engineers (USACE), U.S. Environmental Protection Agency (USEPA), the U.S. Coast Guard, and the State of Alaska conducted an EIS for this project (Alpine Satellite Development Plan). The draft EIS was released in January 2004 for public review and comment (USDOI BLM 2004a); the final EIS was released in September 2004, followed by a Record of Decision in November, 2004 (USDOI BLM 2004c).

The National Petroleum Reserve – Alaska has been the subject of several studies since its creation more than a quarter century ago. Section 105(c) of the NPRPA mandated studies of the resources of the National Petroleum Reserve – Alaska, which were published in 1978 and 1979. In 1985, the BLM completed separate habitat and mineral evaluations of the Teshekpuk Lake Special Area (USDOI BLM 1985a, b). Current planning draws from these previous studies and EISs, and incorporates data from research and monitoring conducted since their completion.

1.6 Decisions to be Made and Implementation

Several decisions will be made through this Amended IAP/EIS process and as previously stated the following will be addressed:

- Consider leasing portions of lands currently closed or under a No Surface Activity restriction to oil and gas leasing in the Northeast National Petroleum Reserve Alaska; and
- Consider developing performance-based lease stipulations and ROPs to provide the BLM greater flexibility in
 protecting important surface resources from the impacts of oil and gas activities, similar to those developed for
 the Northwest National Petroleum Reserve Alaska.

This amendment will analyze the environmental and socioeconomic effects of four alternatives for leasing lands and implementing resource management in the Planning Area: three action alternatives, and the No Action Alternative. These alternatives differ in the amount of acreage that could be leased, locations of areas open and unavailable to leasing, and type of protective measures (prescriptive or performance-based), adopted to protect surface resources in the Planning Area, and other restrictions and deferrals on the nature and extent of oil and gas activities.

This Amended IAP/EIS will assist BLM planners and decision-makers in understanding and incorporating into planning and decision-making potential risks and associated impacts of implementing each alternative. The analysis will consider environmental effects of industrial and other land-use activities in the Planning Area. This Amended IAP/EIS will also compare alternatives in terms of their ability to protect, conserve, and preserve cultural, natural, and socioeconomic resources and values in the Planning Area.

At least 30 days after the USEPA publishes the Notice of Availability (NOA) of the Final Amended IAP/EIS, BLM decision-makers will prepare a ROD. This ROD will include:

- An explanation of the decision on the proposed action;
- Alternatives considered;
- Factors considered in making the decision;
- Any adopted mitigation measures or reasons why mitigation measures were not adopted; and
- A monitoring and enforcement program for those mitigation measures that were adopted.

The decision may be to select one of the alternatives intact or to combine features from several alternatives that fall within the range of alternatives analyzed in this Amended IAP/EIS. The ROD will consider significant impacts, alternatives, environmental preferences, and relevant economic and technical considerations.

1.6.1 Requirements for Further Analysis

Additional NEPA analysis would be required for any management decisions going beyond the scope of this document. Where possible, such analyses would tier from this Amended IAP/EIS.

One important aspect of this amendment is possible oil and gas leasing. It is the subject of much of the analysis in Chapter 4 (Environmental Consequences). In compliance with current regulations of the Council on Environmental Quality (CEQ), part of this analysis relies on a hypothetical development scenario based on general information about areas of high potential for oil and gas in the Planning Area and current industry exploration and development practices. This analysis considers oil and gas leasing, and also includes analyses of potential impacts from projected exploration and development activities. Future actions requiring BLM approval, including a proposed exploratory drilling plan or proposed construction of infrastructure for development of an oil discovery,

would require further NEPA analysis based on specific and detailed information about where and what kind of activity is proposed.

If the Amended IAP/EIS ROD makes additional lands available for oil and gas leasing, a series of additional NEPA and tract-evaluation processes would ensue with each subsequent lease sale. If there is a lease sale, the first sale under the ROD could occur in 2005, with subsequent lease sales every 2 to 3 years thereafter. For analysis purposes, the Amended IAP/EIS assumes that all lands that the ROD determines should be available for leasing would be offered in the first sale. Readers should bear in mind, however, that the first sale might offer only part of the lands identified in the ROD as available. Subsequent sales could offer additional available tracts for leasing as well as re-offer tracts not leased earlier. The area offered, however, would be within the area identified in the ROD of the Amended IAP/EIS as available for leasing. The timing of the second and subsequent sales, if any, would depend in part on the response to the first sale and the results of the exploration that follows.

The BLM anticipates that this Amended IAP/EIS will fulfill the NEPA requirements for the first lease sale. Prior to conducting each additional sale, the agency would conduct a NEPA adequacy evaluation. If the analysis in the Amended IAP/EIS is found to be adequate, the NEPA analysis for any second or subsequent sale may require only an administrative Determination of NEPA Adequacy, or an EA, to support the ROD. If parts of the Planning Area are leased as one outcome of the Amended IAP/EIS, additional NEPA analysis would also be conducted at both the exploration and development stages as part of the permitting process.

1.7 Consistency with Federal, State, and Local Laws and Regulations

The BLM must comply with numerous federal laws that govern activities on public lands. The *Clean Air Act* (*CAA*), as revised in 1990, would primarily govern air pollutant emissions, and requires the USEPA and states to carry out programs to assure attainment of the National Ambient Air Quality Standards (NAAQS). The *Clean Water Act* (*CWA*) regulates discharges into waters of the United States, including wetlands. The *Resource Conservation and Recovery Act* (*RCRA*) regulates the treatment, storage and disposal of solid and hazardous wastes, while the *Comprehensive Environmental Response*, *Compensation and Liability Act* (*CERCLA*) regulates how to clean up releases of hazardous materials and the notification of agencies in case of a release.

Several laws pertain to the protection of plants and animals and their habitats. The *Endangered Species Act (ESA)* provides for conserving endangered and threatened species of plants and animals. The ESA also requires that federal agencies consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service to ensure that any actions that they authorize, fund, or carry out are not likely to jeopardize the continued survival of a listed species or result in the adverse modification or destruction of its critical habitat. The *Magnuson-Stevens Fishery Management and Conservation Act* requires consultation with the NOAA Fisheries Service on Essential Fish Habitat.

The *Fish and Wildlife Conservation Act of 1980* encourages federal agencies to conserve and promote the conservation of non-game fish and wildlife species and their habitats. The *Migratory Bird Treaty Act* makes it unlawful to directly, or indirectly, harm migratory birds. The *Sikes Act* authorizes the USDOI to plan, develop, maintain, and coordinate programs with state agencies for the conservation and rehabilitation of wildlife, fish, and game on public lands.

The *Coastal Zone Management Act of 1972* was re-authorized with the passage of the Coastal Zone Management Act (CZMA) Re-Authorization Amendments of 1990. The act requires states to develop coastal zone management plans and requires states to develop and implement Coastal Nonpoint Pollution Control Programs. The act also requires the NOAA and USEPA to develop guidance and implementation documents for nonpoint pollution of coastal waters.

The *Wild and Scenic Rivers Act (WSRA) of 1968* requires that in all land and water use planning for development, consideration "shall be given by all federal agencies involved to potential wild, scenic, and recreational river areas..." (16 USC § 1276[d]). The Act was created to help preserve rivers from being dammed, channelized, and over-developed and requires that the BLM address wild and scenic river values in its planning efforts. The act establishes a National Wild and Scenic Rivers System and prescribes the methods and standards through which additional rivers may be identified and added to the system.

The *Rivers and Harbors Act of 1899* prohibits the construction of any bridge, dam, dike, or causeway over or in navigable waterways of the U.S. without USACE approval. Under Section 10 of the Act, the building of any wharves, piers, jetties, or other structures is prohibited without USACE approval, and excavation or fill within navigable waters requires the approval of the Chief of Engineers, USACE.

Laws and acts that pertain to the protection of historic and cultural resources and the rights of Alaska Native groups include the *Historic Sites Act of 1935*, which provides for the preservation of historic American sites, buildings, objects, and antiquities of national significance. The *National Historic Preservation Act of 1966* (*NHPA*; 16 USC § 470) requires federal agencies to take into account the potential effects of their actions on properties that are listed or are eligible for listing on the National Register of Historic Places (NRHP), and to consult with State Historic Preservation Officers (SHPOs) and local governments regarding the effects of federal actions on historic properties. The *Archeological Resources Protection Act* prohibits the excavation, removal, damage, or other alteration or defacement of archaeological resources on federal or Indian lands without a permit.

The American Indian Religious Freedom Act of 1978 requires federal land managers to include consultation with traditional Native American or Alaska Native religious leaders in their management plans. The Native American Graves Protection and Repatriation Act of 1990 recognizes the property rights of Alaska Natives in certain cultural items, including Alaska Native human remains and sacred objects. Section 810 of the ANILCA addresses issues related to the effects of proposed activities on subsistence. An ANILCA Section 810 notice and public hearing process is required if a proposed action may have significant impacts on subsistence resources or uses. An evaluation and proposed finding of effects on subsistence resources from actions that could be undertaken under this amendment, provided in Appendix B, was based on information contained in this Amended IAP/EIS, and from public comments.

The *FLPMA of 1976* directs the BLM to "take any action necessary to prevent unnecessary or undue degradation of public lands" and to develop resource management plans consistent with those of state and local governments to the extent that BLM programs also comply with federal laws and regulations. The *NPRPA of 1976* delegates authority to the BLM for surface management of the National Petroleum Reserve – Alaska and protection of surface values from environmental degradation, and encourages the preparation of rules and regulations necessary to carry out its surface management and protection duties.

This EIS follows the guidelines in several Executive orders. Executive Order 11988, Floodplain Management, was enacted in order to avoid, to the extent possible, the long and short-term impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative. Executive Order 11990, Protection of Wetlands, ensures that federal agencies minimize the destruction, loss, or degradation of wetlands, and enhance and preserve the natural and beneficial values of wetlands, when carrying out actions on federal lands. Executive Order 12898, Environmental Justice, requires that federal agencies address the disproportionate effects of their actions on minority populations and on low-income populations. Executive Order 13007, Indian Sacred Sites, directs federal land managing agencies to accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, ensures that federal agencies identify and assess the environmental health and safety risks that may disproportionately affect children. Executive Order 13084, Consultation and Coordination with Indian Tribal Governments, directs federal agencies to respect tribal self-government and sovereignty, tribal rights, and tribal responsibilities whenever they formulate policies "significantly or uniquely affecting Indian tribal governments." Executive Order 13186, Responsibilities of

Federal Agencies to Protect Migratory Birds, requires that federal agencies that have, or are likely to have, a measurable negative effect on migratory bird populations develop a Memorandum of Understanding with the USFWS that shall promote the conservation of migratory bird populations.

1.8 Federal and State Permits and Approvals Needed to Implement the Proposed Action

The following discussion focuses on some of the permits that would be required by various agencies during any exploration or development activities in the Planning Area. A more inclusive list is provided in Appendix C. In developing additional NEPA documentation for any such future activities, a consideration of the data needs of other agencies that have the authority to issue necessary permits for these activities would allow those agencies to either use or tier off the document for any additional required analysis.

The USACE administers two permits relevant to proposed oil and gas activities in the Planning Area. The first permit is issued pursuant to Section 404 of the Clean Water Act, which addresses the discharge of dredged or fill material into U.S. waters, including wetlands. In addition, the Alaska Department of Environmental Conservation (ADEC) must certify that the 404 permit meets state water quality standards. To meet Section 404 requirements, any future NEPA document would describe the project's components, identify the type and amount of wetlands and other waters affected by each alternative, describe anticipated impacts, and discuss mitigation measures that could minimize impacts to these resources.

Section 10 of the Rivers and Harbors Act of 1899 is the source for the second USACE-administered permit. To address the requirements of this section, as they pertain to construction of structures or work in or affecting navigable waters of the U.S., any future NEPA document must describe the navigable waters of the U.S within the project area and how structures in, on, or over these waters would affect them during construction and operation. The NEPA document would describe the alternatives and compare possible impacts to coastal integrity and navigation for each alternative. It would also discuss mitigating measures to minimize these impacts.

The USEPA issues National Pollution Discharge Elimination System (NPDES) permits required by the Clean Water Act. To provide information for these permits, any future NEPA document would describe existing water quality and the quantity of water requirements for the proposed project, expected pollutants and their concentrations, and the quality and locations of wastewater treatment facilities and discharges. The USEPA administers, and the ADEC issues, other Clean Water Act mandated permits for Waste Water Authorization, Oil Discharge Prevention and Contingency Plans, Storm Water Discharge, and Underground Injection Authorizations.

Under their State Implementation Plan, the ADEC issues Prevention of Significant Deterioration (PSD) and other air quality permits. Any future NEPA document would provide an analysis of meteorological factors and air quality baseline conditions, and would predict impacts to air quality during construction and operation to provide information necessary to evaluate the issuance of these permits.

The ADEC is responsible for issuing several permits and plan approvals for oil and gas exploration and development activities, including the storage and transport of oil and cleanup of oil spills. The Alaska Oil and Gas Conservation Commission is responsible for issuing drilling permits and for production, injection, and disposal plan approvals for exploration and development activities in the State of Alaska.

1.9 Interrelationships and Coordination with Other Agencies

In its role as manager of over 80 million surface acres in Alaska, the BLM has developed relationships with federal, state, and local agencies, and conservation and environmental groups with an interest in resource management, as well as members of the public that use public lands or are impacted by activities on public lands.

As noted earlier, several federal agencies administer laws that govern activities on public lands. Federal agencies, including the National Park Service and USFWS, administer lands adjacent to or in close proximity to the Planning Area, and address resource management issues that are similar to those addressed by the BLM. These agencies and the BLM regularly coordinate on resource management efforts to benefit all federally administered lands.

The BLM is required to coordinate with state and local agencies under several acts, including the Sikes Act, FLPMA, and Section 106 of the NHPA. The BLM coordinates closely with state resource management agencies on issues involving the management of public lands and protection of fish and wildlife populations, including federal and state-listed threatened and endangered species.

The BLM coordinates at the national and local level with several resource advisory groups, including the BLM Resource Advisory Council. The BLM also solicits input from national and local conservation and environmental groups with an interest in land management activities on public lands.

The Planning Area contains large numbers of birds. Most importantly, large numbers of several goose populations from Canada, Russia, and elsewhere in Alaska molt in the Teshekpuk Lake Special Area, and several raptor species nest in the Colville River Special Area. Because most of these species migrate along the Pacific and mid-Continent flyways and other major corridors to distant localities where they spend most of the year, their conservation and management is of interest to numerous stakeholder groups. Most stakeholder interests are addressed by one or more international agreements signed by the U.S. These include the Migratory Bird Treaty Act conventions with Mexico, Canada, and Russia; the North American Waterfowl Management Plan; Partners in Flight Bird Conservation plans; the U.S. and Canadian National Shorebird plans; the North American Colonial Waterbird Plan; the Arctic Goose Joint Venture; the North American Bird Conservation Initiative; the U.S. and Russia Area V Agreement; and the Conservation of Arctic Flora and Fauna. Achieving the goals of these agreements relies on cooperative conservation partnerships or joint ventures. Currently, there are 11 joint ventures in the U.S. and three in Canada that have used international agreements to develop area or species-specific management plans.

To ensure local participation in the decision-making process as it relates to subsistence in the National Petroleum Reserve – Alaska, the BLM established a local Subsistence Advisory Panel (SAP). The tribal governments of Anaktuvuk Pass, Atqasuk, Barrow, Nuiqsut, and Wainwright, and the North Slope Borough (NSB) are represented on the panel. The SAP's purview encompasses all of the National Petroleum Reserve – Alaska, including the Planning Area. The responsibilities of this panel are and will continue to be to:

- Provide recommendations to the BLM concerning planning, research, monitoring, and assessment activities needed to facilitate responsible development and to protect subsistence resources and uses in the National Petroleum Reserve – Alaska;
- Identify potential conflicts between subsistence use and other resource uses;
- Inform local communities about agency actions affecting subsistence resources and uses in the Planning Area;
- Inform agencies of panel activities;
- Work with the NSB to maintain a repository of subsistence information concerning the Planning Area for local communities and agencies; and
- Help the BLM ensure continuity and consistency in the collection and use of subsistence information by the advisory panel and other groups.

The panel is responsible for the review of resource-related development plans within the Planning Area and issuance of recommendations to the BLM regarding whether the plans adequately consider subsistence. The BLM will work with the panel and any permittees to resolve conflicts between subsistence use and resource development. The BLM will work closely with the panel to develop a plan to monitor the effects of development

on subsistence resources and users. Should monitoring identify the existence of impacts on subsistence uses, the panel would make recommendations to the BLM regarding: 1) additional mitigating measures, 2) potential relocation of operations or redesign of facilities, and 3) more effective mechanisms for enforcement of subsistence stipulations.

The 1998 Northeast IAP/EIS ROD authorized a Research and Monitoring Team (RMT), whose chartered mission included determining the effectiveness of mitigation and stipulations outlined in the 1998 Northeast IAP/EIS. The RMT charter was signed by the Secretary of the Interior in November 2000 and during the time the RMT was actively operating the following activities occurred:

- A draft for the Northwest IAP/EIS was published;
- The BLM announced it would consider amending the 1998 Northeast IAP/EIS;
- A Notice of Intent was published and scoping efforts begun for a full-field development plan at the Alpine Satellite Development Plan in the Colville River Delta; and
- Congress considered reauthorizing oil and gas activities in the Arctic National Wildlife Refuge.

A decision made in March of 2003 allowed the RMT charter to lapse with the assumption that the newly created North Slope Science Initiative (NSSI) would broaden the scope of management of federal research and monitoring actions to the entire National Petroleum Reserve - Alaska.

In the interim, BLM solicited advice on how to continue to receive a wide perspective of input on research and monitoring across the entire Petroleum Reserve from the Alaska Resource Advisory Council (RAC) at the quarterly meeting November 13, 2003. The RAC sponsored and established an Interim National Petroleum Reserve Research and Monitoring Subcommittee under Section10 of the RAC Charter in 2004. The subcommittee follows the duties defined in Section 7 of the original 1998 Research and Monitoring Team charter. The new National Petroleum Reserve - Alaska Research and Monitoring Team Subcommittee provides advice and recommendations to the RAC, who in turn provide advice to the BLM until the NSSI is fully established.

The North Slope Science Initiative is envisioned to provide better understanding of the terrestrial, aquatic, and marine ecosystems of the North Slope. Science will be conducted through a comprehensive science plan, prioritization of pressing natural resource management and ecosystem information needs, coordination and cooperation among agencies and organizations, competitive selection of approved projects, enhanced information availability, and public involvement.

A North Slope Management Oversight Group (NSMOG) will be an executive level organization that develops and implements the science strategy. The group will include executive membership from federal, state, and local government agencies that have land trust responsibilities across the North Slope. The group would emphasize coordination and cooperation in supporting research inventorying and monitoring activities. The group's goals would be to: 1) improve the understanding of North Slope terrestrial aquatic and marine ecosystem dynamics; 2) encourage conservation and wise use of natural resources; 3) manage and protect these ecosystems and components; and 4) develop the ability to forecast and respond to the effects of natural and human-induced change, through integration of various science activities.

A Science Technical Advisory Panel will be an integral part of shaping this strategy by providing the NSMOG technical advice on proposed inventory, monitoring, and research functions. The panel would have a membership similar to the former RMT, but would be broader in discipline and geographic scope.

As demonstrated at public scoping meetings for this amendment, the public is deeply interested in BLM activities within the Planning Area, and particularly those individuals that live in close proximity to the National Petroleum Reserve – Alaska, have commercial operations dependent on operations that occur on or adjacent to the National Petroleum Reserve – Alaska, or use the National Petroleum Reserve – Alaska for subsistence or recreation. The

BLM strives to keep the public informed about its resource management activities through regular coordination and communication. The BLM also encourages the public to participate in the environmental review process during the development and analysis of local management programs.

1.10 Consultation

The BLM is consulting with the USFWS and NOAA Fisheries Service as required under Section 7 of the ESA. As part of this process, the BLM prepared a formal initiation package that included a description of the program, species proposed for listing, listed species, critical habitats that may be affected by the program, and a Biological Assessment (BA) that evaluated the likely impacts to listed species and critical habitats from the proposed action and suggested best management practices to minimize impacts to listed species (Appendix D). In addition, the BLM coordinated with the NOAA Fisheries Service on Essential Fish Habitat as required under the Magnuson-Stevens Fishery Management Act. Consultations with the Services pursuant to the ESA and Magnuson-Stevens Fishery Management Act are ongoing and will be completed by the time of signing of the ROD.

The BLM consulted with Alaska Native groups to identify the cultural values, religious beliefs, traditional practices, and legal rights of Alaska Native groups that could be affected by BLM actions. Consultation activities included sending out letters to Alaska Native groups that could be directly affected by the proposed activities, holding numerous meetings with Native groups, and requesting information on how the proposed activities could impact Alaska Native interests, including the use of wildlife for subsistence, religious, and ceremonial purposes. Consultation activities with Alaska Native groups are ongoing and activities completed to date are summarized in Chapter 5 (Consultation and Coordination).

The BLM consulted with the Alaska SHPO as part of Section 106 consultation under the NHPA to determine how proposed industrial activities could impact cultural resources listed on or eligible for inclusion in the NRHP. Formal consultations with SHPO also may be required during implementation of individual projects. Consultations with SHPO are ongoing and will be completed by the time of the signing of the ROD.

The BLM is consulting with the State of Alaska to ensure that the mandates of the CZMA are met. The required compliance documentation will be included in the Amended IAP/EIS ROD.

1.11 Public Involvement, Scoping, and Key Issues

The BLM has sought to define the issues in the Planning Area through public participation and discussions with the state, the NSB, other federal agencies, and the public (see Chapter 5, Consultation and Coordination).

The purpose of scoping is to focus the analysis in the Amended IAP/EIS on the significant issues and reasonable alternatives in order to eliminate extraneous discussion and to reduce the length of the Amended IAP/EIS. Scoping is an ongoing process that helps to involve the public in developing the Amended IAP/EIS.

The BLM published a Federal Register Notice of Intent to Plan (Notice) and a Call for Nominations and Comments (Call), on June 23, 2003. The Notice and Call asked the public to help the BLM identify issues and resources relevant to planning and potential oil and gas leasing. The BLM also asked oil companies to identify their areas of interest within the Planning Area. The Notice and Call also stated that the period in which comments would be taken on the proposal would be from June 23 through September 30, 2003. On September 15, 2003, the BLM published a Notice of Extension that extended the period for accepting scoping comments until October 31, 2003.

Comments on the proposal could be submitted in writing to the BLM Project Manager or via an interactive website (http://nenpra.ensr.com). In addition, the BLM held six public scoping meetings throughout Alaska. Written and oral comments were accepted at these meetings, and a court reporter prepared a transcript of the oral comments. A translator was also provided for the public meetings in Atqasuk, Anaktuvuk Pass, Barrow, and Nuiqsut, Alaska.

1.11.1 Public Scoping Notices and News Releases

Public notices were issued announcing the scoping period, which were placed in newspapers in or near locations where public meetings were held. These included the Anchorage Daily News (October 5 and 7, 2003), Fairbanks Daily News Miner (October 5 and 8, 2003), and Arctic Sounder (October 9, 16, and 23, 2003).

1.11.2 Public Scoping Meetings

Six public scoping meetings were held throughout Alaska between October 7 and November 13, 2003. Meetings (and dates) were as follows: Anchorage (October 7), Fairbanks (October 8), Nuiqsut (October 15), Barrow (October 16), Anaktuvuk Pass (October 28), and Atqasuk (November 13). The scoping meetings were conducted in an open-house style. Informational displays were provided, and a formal presentation provided the public with additional information on program goals and objectives. The formal presentation was followed by a public comment session.

In addition, informal public meetings were held in 2004 in Nuiqsut (January 19) and Barrow (January 26) to describe the proposed alternatives and ROPs and stipulations.

1.11.3 Agency and Organization Meetings

The BLM conducted a 2-day workshop in Anchorage on December 3-4, 2003, to describe and develop ROPs and stipulations for use in the Planning Area. Attendees included representatives from federal, state, and local agencies, and representatives from the village of Nuiqsut. In addition, the BLM has held ongoing discussions with numerous federal, state, and local agencies and organizations. These groups are listed in Chapter 5 (Consultation and Coordination).

1.11.4 Key Issues and Concerns

The BLM received 72 requests to be placed on the project mailing list from individuals, organizations, and government agencies, and 84 written comment letters or facsimiles on the proposal. In addition, the public provided comments on the project at the public scoping meetings. Over 1,000 catalogued individual comments (written and oral) were given during public scoping. In many cases, multiple respondents submitted the same comment. A *Public Scoping Summary Report for the Amendment to the National Petroleum Reserve – Alaska Integrated Activity Plan/Environmental Impact Statement* (ENSR 2004) was prepared that summarized the issues and alternatives identified during scoping. This document was made available to the public in February 2004 and is available for viewing on the project website (http://nenpra.ensr.com).

The BLM reviewed the concerns and questions raised during the public scoping process and integrated solutions to many of the issues into elements of the alternatives that are analyzed in this amendment (see Chapter 2, Alternatives). Some of the key issues and concerns addressed in the Amended IAP/EIS are summarized below.

1.11.4.1 Impacts on Water Resources

Numerous comments addressed water quality issues, and the effects of water withdrawals on hydrology and fish and wildlife habitat. Comments recommended that ROPs regarding water resources conform to state stipulations since the ADNR has the authority to approve water withdrawals from surface and subsurface water bodies in Alaska.

1.11.4.2 Impacts on Waterfowl and Shorebirds and Their Habitats

Comments encouraged the BLM to address impacts from disturbance, spills, garbage dumping, thermokarsting, displacement, and an increase in predator populations on bird nesting, rearing, and molting habitats. The following species were specifically mentioned: loon (yellow-billed and red-throated), brant, eider (spectacled, king, and Steller's), goose, duck (long-tailed), raptors, and shorebird (buff-breasted sandpiper) populations. It was also suggested that impacts to subsistence use of bird resources and impacts to waterbird populations on their ranges outside of the North Slope be addressed.

1.11.4.3 Impacts to Caribou, Polar Bear, and Grizzly Bear

Concern was expressed over the impacts to caribou, polar bear, and grizzly bear and subsistence use of these wildlife resources. It was suggested that important habitat areas be identified and protected. Some comments requested clarification about how populations would be monitored. Other comments suggested specific ROPs and stipulations to protect these resources.

1.11.4.4 Wilderness Values and Special Area Protections

The protection of important historic, cultural, and scenic values, and fish and wildlife resources was encouraged, and consideration of the wilderness qualities of lands in the Planning Area was also recommended.

The Teshekpuk Lake Special Area is important to North Slope residents for subsistence hunting and fishing and is recognized for its importance during critical lifestages of waterbirds and the Teshekpuk Lake caribou herd. This area also includes some of the lands under study considered to have the highest potential for oil and gas resources. Surface resources could be impacted by oil and gas development and other potential land use activities in the Planning Area.

1.11.4.5 Impacts to Cultural Resources and Subsistence

Some commentors were concerned about minimizing the impacts on the Iñupiat subsistence culture by maintaining cultural, historic, scientific, and wildlife values, and understanding, respecting, and protecting the historic uses of the Iñupiat people. There was concern about alterations to subsistence resources, access, Native food sources, fish and wildlife migration patterns, and traditional places both within and outside the Planning Area. Some worry that oil and gas pipelines or roads may affect caribou migration, that oil spills could affect fish or marine mammals, and that shoreline development such as docks or causeways, could impact marine animal migrations.

1.11.4.6 Social and Economic Impacts

Comments encouraged the analysis of social, cultural, and traditional uses, interests, and views of the Iñupiat Eskimo people, other residents of the NSB (particularly residents within or immediately adjacent to the National Petroleum Reserve – Alaska such as Nuiqsut, Barrow, Atqasuk, and Wainwright), and Arctic Slope Regional Corporation's shareholders. The impacts from an increased number of visitors to the North Slope and impacts from recreationists that do not reside within the North Slope were also mentioned. Commentors were concerned about impacts to minority and/or low income populations, how these impacts would be mitigated, and demonstrating how environmental justice requirements would be met in the Amended IAP/EIS process. There was support for environmentally sound oil and gas exploration and development because of related tax revenues. Some comments encouraged employment and economic opportunities for affected Native communities, institutions, and local governments.

1.11.4.7 Transportation and Infrastructure Impacts

The construction of gravel roads and drill pads, permanent roads, ice roads, pipelines, airstrips, docks, bridges, and other infrastructure were raised as issues that should be considered both as benefits and environmental impacts.

Specific mention was also made of tundra travel restrictions and aircraft use. Some comments recommended addressing an alternative that considers a full-field development scenario, including transportation infrastructure.

1.11.4.8 Oil and Gas Exploration and Development

A common concern expressed during scoping was the impact that oil and gas activities could have on the biological resources and the primitive natural values of this area. Local residents are very concerned with these issues relative to their subsistence use. Most questions about the future management of the Planning Area revolve around whether the BLM should offer oil and gas leases in the Teshekpuk Lake area and, if so, with what restrictions. Some people believe that advances in oil field technology, such as extended-reach drilling and smaller areas required for production pads, have greatly reduced the industry's impact on the environment. The BLM was encouraged to utilize realistic development scenarios, including the scenario of full-field development. Comments suggested considering technological advances in exploration and development, and addressing how the natural and human environment has changed in the Planning Area since 1998.

1.11.4.9 Stipulations, Regulations, and Required Operating Procedures

Comments ranged from retaining current stipulations to developing consistent, performance-based ROPs and stipulations throughout the National Petroleum Reserve – Alaska. Some commentors supported review of current stipulations to determine their current applicability and ability to protect surface resources, taking into account technological advancements. Some comments requested clarification about the need to revise the 1998 Northeast IAP/EIS stipulations and wanted to know which stipulations would be changed. Many commentors said stipulations should provide adequate protection to wildlife and sensitive resources, as well as subsistence and cultural resources. Some comments also made suggestions for specific stipulations and operating procedures.

1.12 Draft Amended IAP/EIS Review and Public Comment

The Notice of Availability (NOA) of the Draft Amendment to the Northeast National Petroleum Reserve-Alaska Integrated Activity Plan/Environmental Impact Statement (IAP/EIS) and the Announcement of Public Subsistence-Related Hearings Schedule was published in the Federal Register on June 9, 2004. The public comment period was originally scheduled from June 9, 2004, through August 8, 2004, however, it was extended through August 23, 2004. Public notices announcing the comment period and public hearings were placed in newspapers in or near locations where public meetings were held. These newspapers included the Arctic Sounder (August 8 and 15, and October 28, 2004) and Tundra Drums (August 12 and November 11, 2004). Public service announcements were broadcasted on radio station KBRW from July 27 through August 17, and during late October through November 2004. The BLM issued a press release on June 9, 2004, notifying the public that the Draft Amended IAP/EIS was available for public review, and the schedule for public comment and ANILCA 810 subsistence hearings. Notices were posted at public gathering places in Nuiqsut, Barrow, Anaktuvuk Pass, and Atqasuk, all located on the North Slope of Alaska, and Bethel, Alaska, located on the Yukon Delta. Information on the Draft Amended IAP/EIS was also posted on the interactive website (http://nenpra.ensr.com). The public was able to access the website to download a copy of the Draft Amended IAP/EIS and provide their comments (including attachments). Comments and attachments posted to the website were incorporated into a database for later analysis by the core planning team.

1.13 Hearings

Public hearings and subsistence hearings were held in Anchorage on June 28, Fairbanks on June 29, Washington D.C. on July 1, Anaktuvuk Pass on August 3 and November 8, Nuiqsut on August 9 and December 1, Atqasuk on August 10 and November 4, Barrow on August 12 and November 5, and Bethel on August 17 and November 11, for the BLM to provide an overview of the alternatives and to take public comments and subsistence testimony. Over 214,000 comments were received on the Draft Amended IAP/EIS. These included letters, electronic mail, facsimiles, comments and attachments posted to the project website, and comments provided at the public

hearings. A summary of the comments received and specific comments and responses are presented in Volume II, Chapter 6, of this Final Amended IAP/EIS. All comment letters are reproduced on the CD located in the back pocket of Volume I.

After completion of the public subsistence hearings and closure of the public comment period, the core planning team, resource staff, and management met to review the comments and alternative proposals and to develop the BLM's final Preferred Alternative. Several alternative proposals were received. These included proposals to close or open additional areas to leasing and development; place greater or lesser restrictions on the types of activities allowed under lease stipulations and ROPs; and combine elements of two or more alternatives (e.g., select Alternative A, but replace the 1998 stipulations with stipulations and ROPs developed for Alternative B).

1.14 Limitations of the Amended IAP/EIS

This Amended IAP/EIS addresses the impacts associated with a decision to fully implement the amendment, including hypothetical development scenarios. Reasonable hypothetical scenarios were developed because the actual sites of future development activities in the Planning Area are unknown at this time.

Additional site-specific impacts would be assessed in NEPA assessments prepared by the BLM for future actions and tiered to this document. The analyses of impacts in this Amended IAP/EIS are based on the most recent information available, and estimates of the types of development activities likely to occur within the next 10 to 15 years. If changes in the proposed activities and levels occurred, they would be reviewed to determine whether additional environmental documentation was needed, such as an Administrative Determination of NEPA Adequacy, an EA, or an EIS. This Amended IAP/EIS would serve as a source document that could be used to support any additional documentation that may be required. Any new or additional actions would also be evaluated for compliance with federal, state, and local laws and regulations prior to implementation, and the public would be informed of any major actions that may be considered for implementation by the BLM as part of the NEPA compliance process.

1.15 Preview of the Remainder of the Amended IAP/EIS

The format of this EIS follows guidance provided by CEQ and *BLM NEPA Handbook H-1790-1* (USDOI BLM 1988). Because this EIS contains a broad range of information, Figure 1-1 shows the types of information found in the EIS, and where it is located.

VOLUME 1

Chapter 1 Introduction

Summarizes the purpose of and need for this EIS, and decisions to be made

Chapter 2 Alternatives

Describes and compares proposed management alternatives

Chapter 3 Affected Environment

Presents existing natural and socioeconomic resources at the Northeast National Petroleum Reserve – Alaska

Chapter 4 Environmental Consequences

(Sections 4.1 to 4.6)

Evaluates impacts of the alternatives on resources in the Northeast National Petroleum Reserve – Alaska, and describes planned stipulations and ROPs

VOLUME 2

Chapter 4 Environmental Consequences (Sections 4.7 to 4.12)

Evaluates the cumulative effects of past, present, and future actions on natural and social resources in the Planning Area and on the North Slope

Chapter 5 Consultation and Coordination

Describes the scoping process, agencies contacted, government-to-government consultation, development of the final Preferred Alternative, and lists preparers of the Amended IAP/EIS

Chapter 6 Comments

Provides a summary of the comments received on the Draft Amended IAP/EIS

VOLUME 3

Appendices

- A 1998 Northeast Record of Decision
- B ANILCA Section 810 Analysis of Subsistence Impacts
- C Federal, State, and Local Permits and/or Approvals Needed for Oil and Gas Exploration, Development, and Production Activities
- D Endangered and Threatened Species Consultation and Final Biological Assessment
- E Stipulations from the 1998 Northeast IAP/EIS Record of Decision
- F Standardized Stipulations Applied to Mitigate the Impacts of Non-oil and Gas Authorizations
- G Sensitive Species List for Alaska
- H Scientific, Common, and Iñupiaq Names of Species Listed in Amended IAP/EIS
- I Historic Sites
- J Subsistence Activities in the Northeast National Petroleum Reserve Alaska
- K Information, Models, and Assumptions Used to Analyze the Effects of Oil Spills
- L Memorandum of Understanding

Maps. References. Glossarv. and Index

Figure 1-1. How This IAP/EIS is Organized.